



# Using Long-Term REC Contracts to Help Developers Secure Project Financing

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# The Massachusetts Renewable Energy Trust

- Funded by a system benefits charge established under the MA 1997 electricity restructuring law
- The Trust's mission:
  - Increase the supply of and demand for energy from clean sources
  - Promote the development of a vibrant Massachusetts renewable energy industry
  - Maximize benefits to Massachusetts ratepayers
- Collect approximately \$25 million annually



# Project Financing is Difficult to Secure in New England

- Projects need revenues from REC sales
- REC revenue is subject to regulatory/political risk
- Financiers unwilling to take REC revenue risk on merchant plants
- Long-term REC contracts with creditworthy buyers are needed, but . . .
  - Retail suppliers serving load in restructured utility territories cannot count on having load in 10 years
  - Few creditworthy purchasers have emerged in the REC market
  - Few entities willing to make even 5 year commitments for energy or RECs



# One Solution: Mass. Green Power Partnership (MGPP)

- Goal: Provide REC revenue certainty to developers through long-term contracts
- Trust manages market risks regarding future REC value
- MTC offers long-term REC contracts
  - Up to 10 year contracts
  - Purchase
  - Options (put, put-back, collar)
- MTC escrows funds
- The contracts establish a Massachusetts use limitation on the RECs



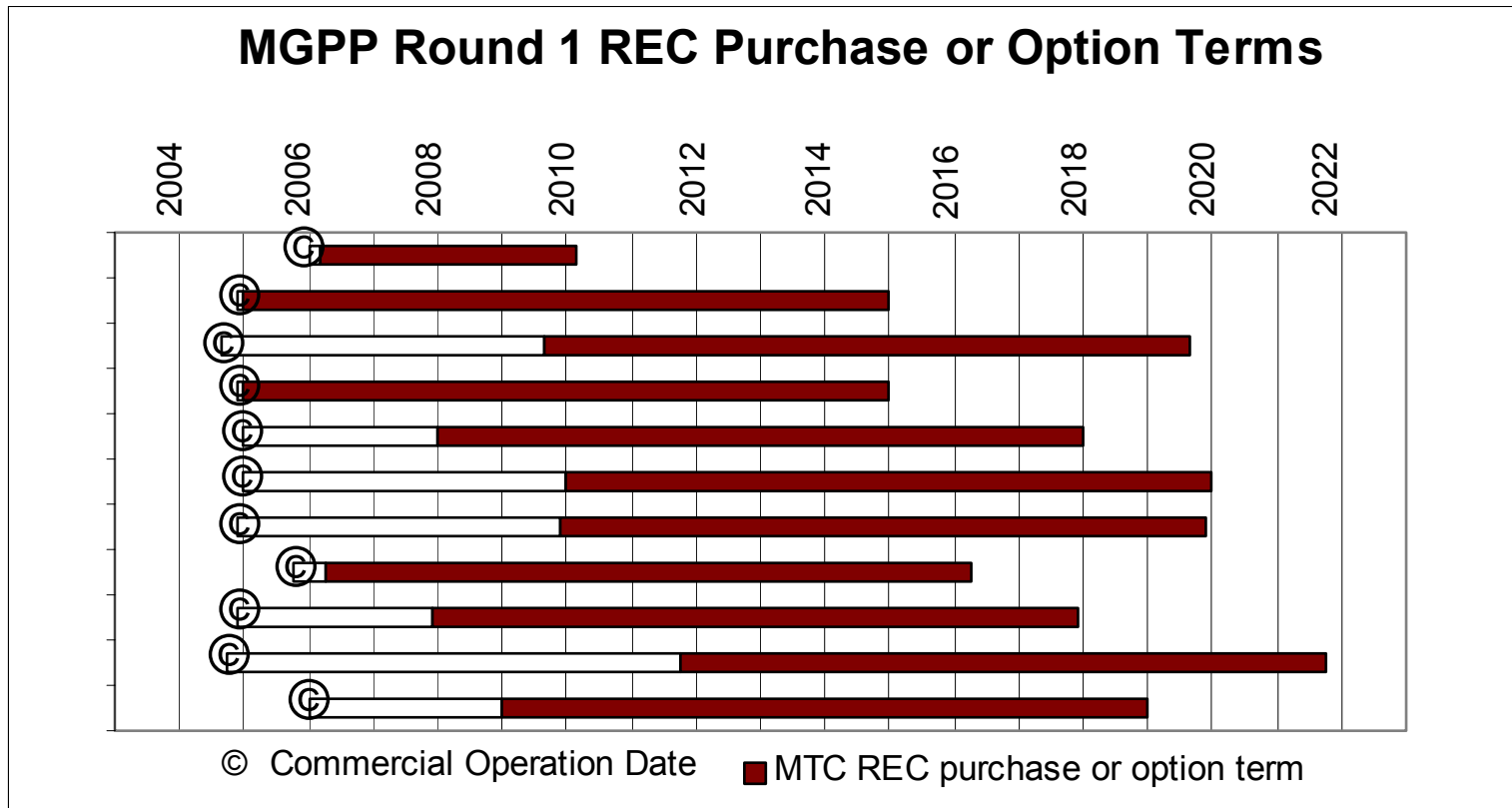
# MGPP Round 1 (2003)

- Applicants: generator or marketer
- Eligible Projects:
  - New construction or incremental generation
  - Must “produce” NE-GIS Certificates (RECs)
  - MA RPS-eligible, plus new hydro
  - Commercial operation by 12/31/2005
- 11 proposals received
  - Biomass      1
  - Hydro        2
  - LFG          2
  - PV            1
  - Wind – small      2
  - Wind – large      3

# MGPP Round 1 Contracts (2003)

Project	Tech.	Location	Form	MW	Present Value Exposure
Berkshire Wind, LLC	Wind	Hancock, MA	Purch.	15	5,491,000
Brockton Brightfields (City of Brockton)	PV	Brockton, MA	Option	< 1	644,000
CommonWealth New Bedford Energy, LLC	LFG	Dartmouth, MA	Option	3 +	2,019,000
Hoosac Wind, LLC	Wind	Florida, MA Monroe, MA	Option	30	9,943,000
Pepperell Hydro, LLC	Hydro	Pepperell, MA	Purch.	1 +	611,000
Northern Wood Power - Schiller (Public Service Co. of NH)	Bio.	Portsmouth, NH	Option	50	2,379,000
<b>Totals</b>				<b>100</b>	<b>21,087,000</b>
<b>MTC Nominal Exposure</b>					<b>33,455,000</b>

# Round 1: Playing the REC Market vs Seeking a Guarantee







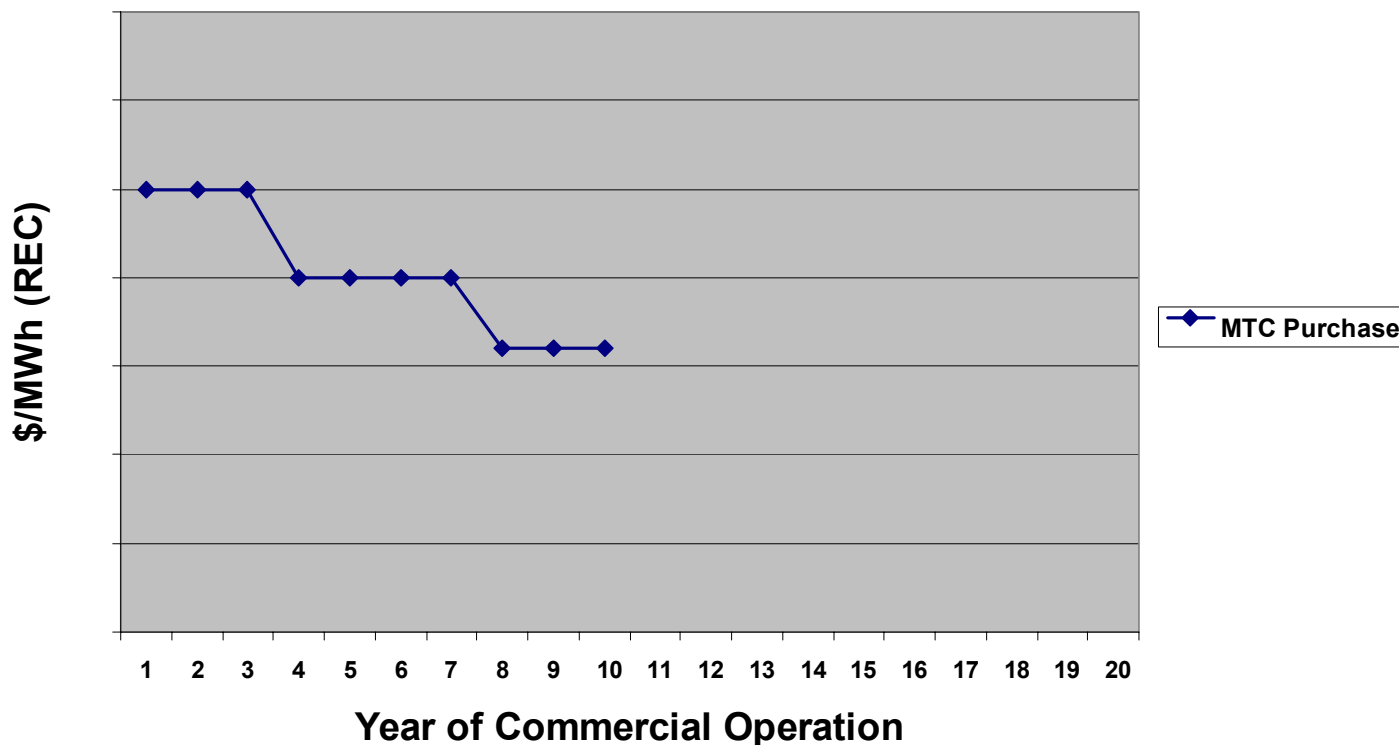
# Deal Considerations for Proposers

- Can I market the RECs?
- Do I have near-term sales opportunities?
- What term of cash-flow certainty is needed?
- Is it important to me to preserve some up-side potential?
- Am I willing to take some REC price risk?
- Can I get someone else to assume some risk (i.e. other than MTC)?

*NOTICE: The following slides illustrate some of the REC deals proposed to MTC in round 1. REC price values are not shown on the charts, and the scales have been modified, in order to preserve pricing confidentiality.*

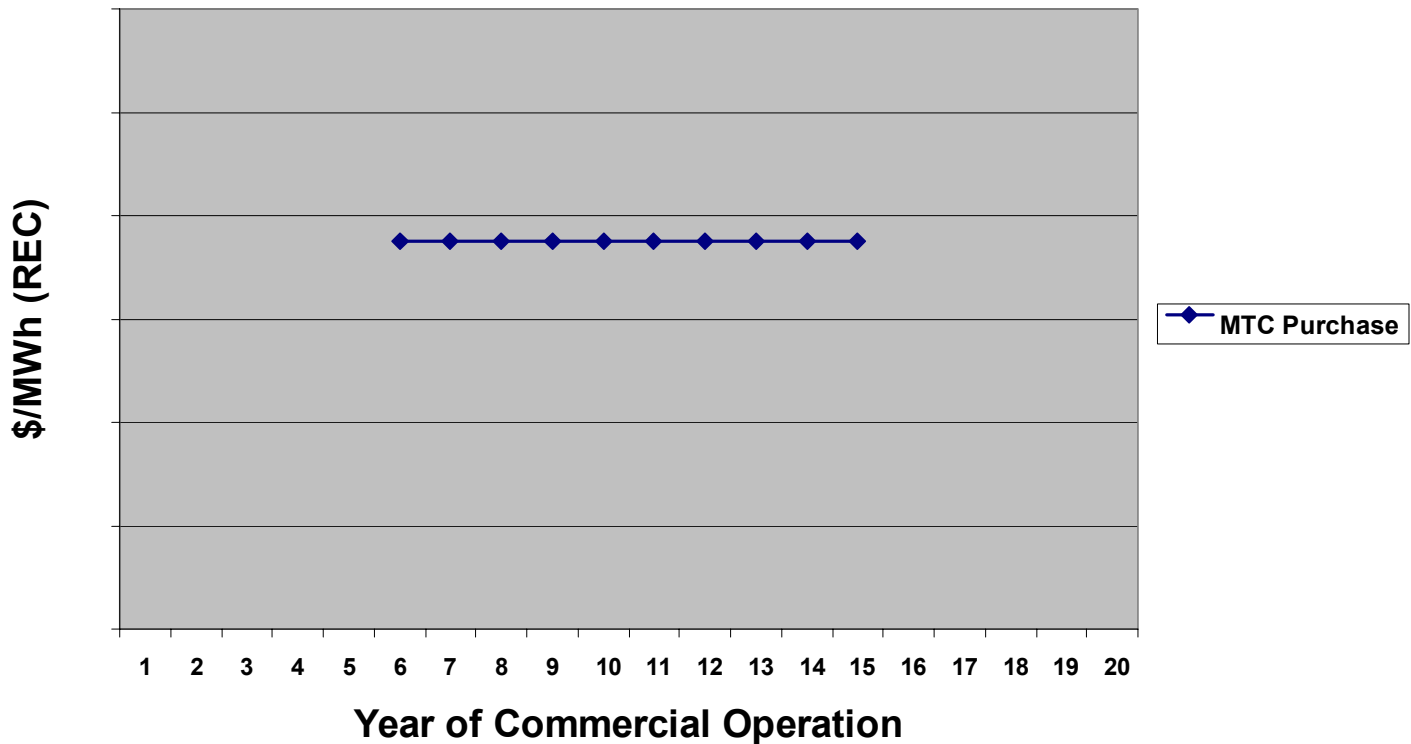


# Example 1: MTC REC Purchase



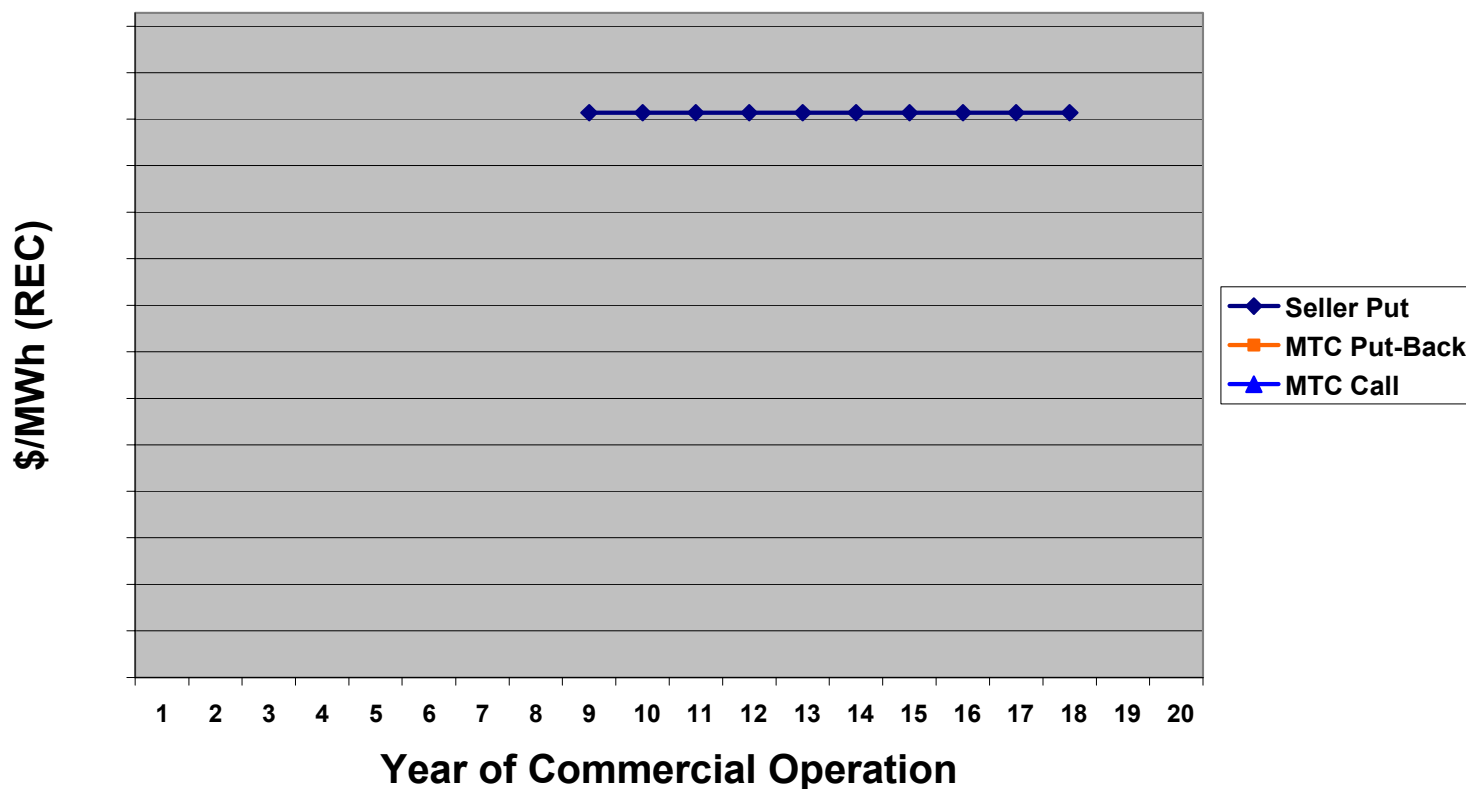
- Possible interpretations:
  - The applicant elected not to undertake REC marketing on its own
  - No “up-side” REC market profit potential for the applicant during the MTC purchase period
  - Step function REC sale price front-loads cash flow to the project

## Example 2: MTC REC Purchase



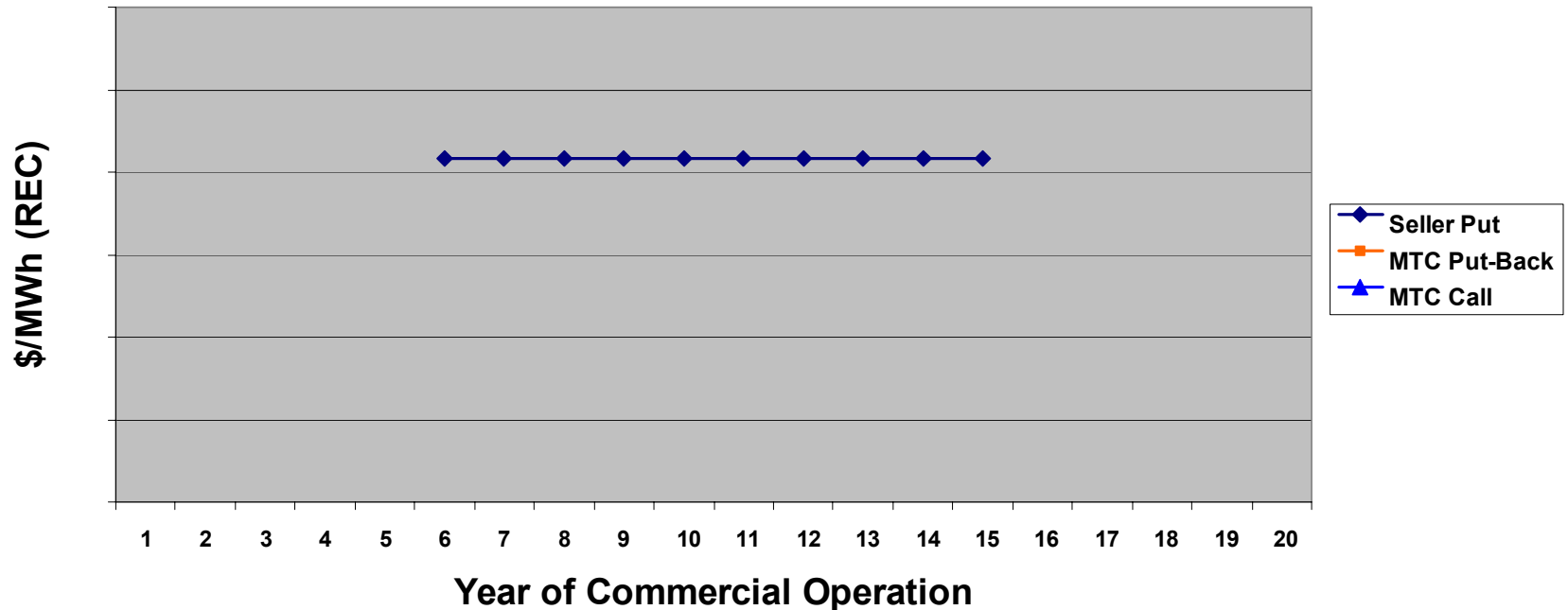
- Possible interpretations:
  - Applicant likely needs greater than 10 years of REC cash flow certainty
  - Applicant willing or able to undertake near-term REC marketing
  - No “up-side” REC market potential for the applicant during MTC purchase period

# Example 3: Brockton Put Option



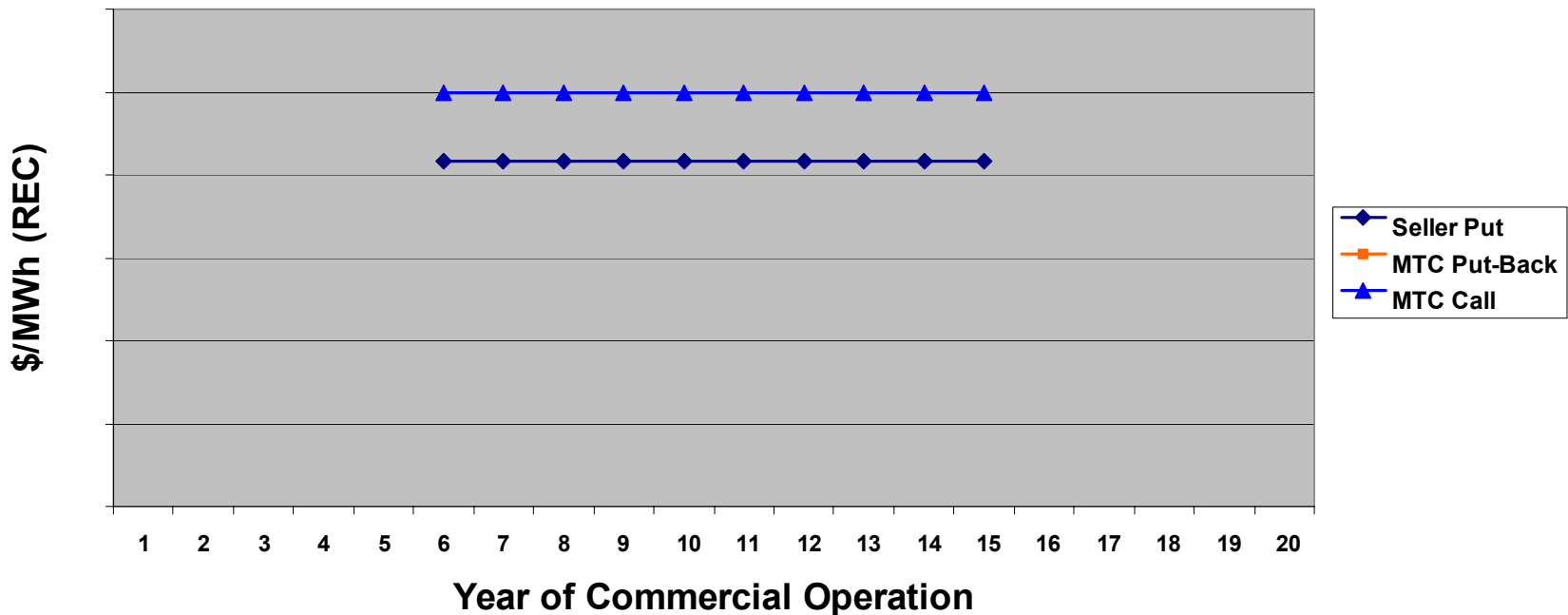
- Possible interpretations:
  - REC prices for PV projects are too high for compliance markets; applicant must focus on voluntary market
  - Municipally-financed project also requires REC cash flow guarantee for later years
  - Applicant seeking deals w/ marketers for near-term REC sales

## Ex. 4-A: Seller Put Option (x% of RECs)



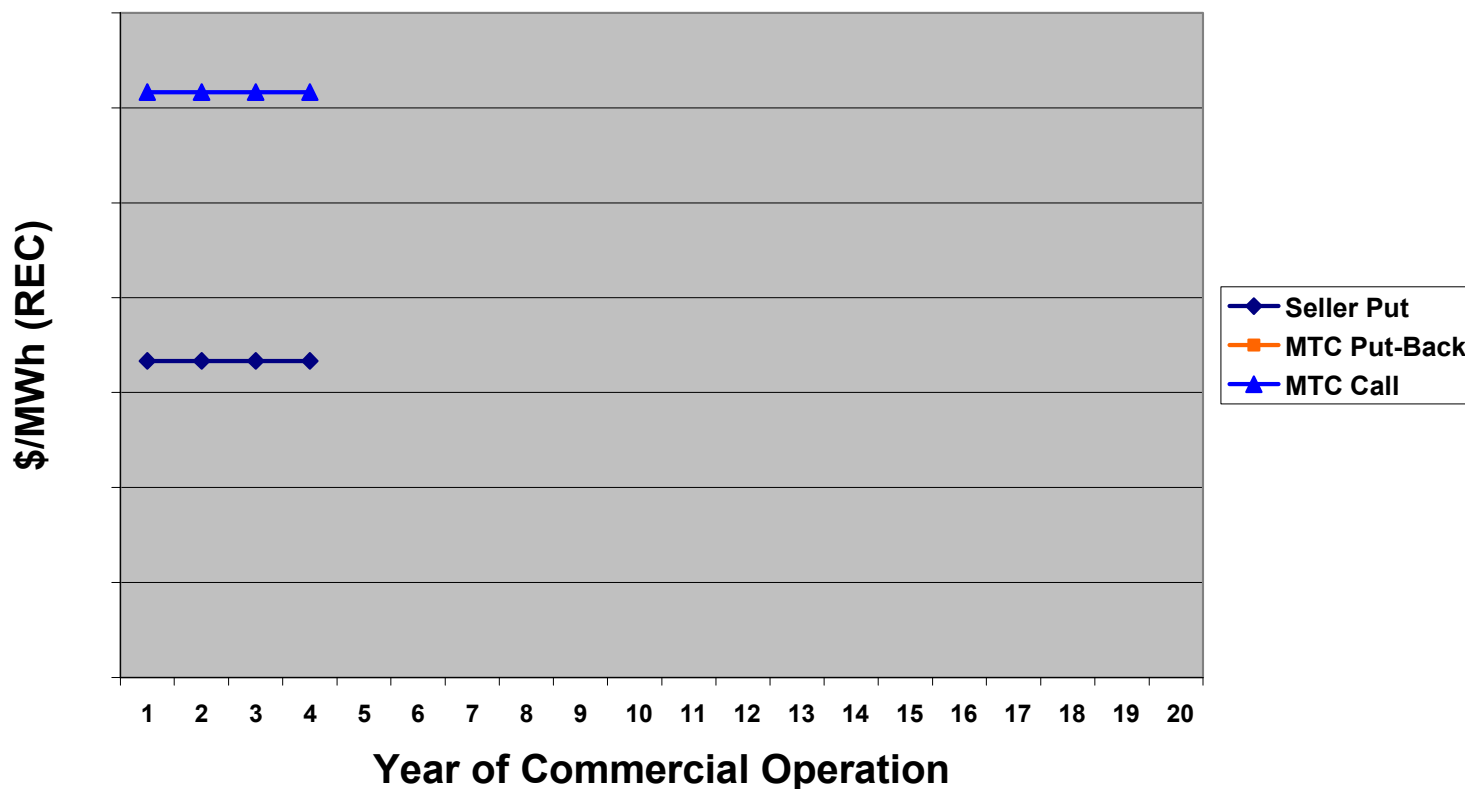
- Possible interpretations (part 1 of 2):
  - Applicant elected to split RECs between two types of options
  - Applicant negotiating REC sale for early years
  - Straight put option preserves marketing options/up-side potential for applicant
  - Straight put option requires premium payment to MTC

## Ex. 4-B: Seller Put & MTC Call (y% of RECs)



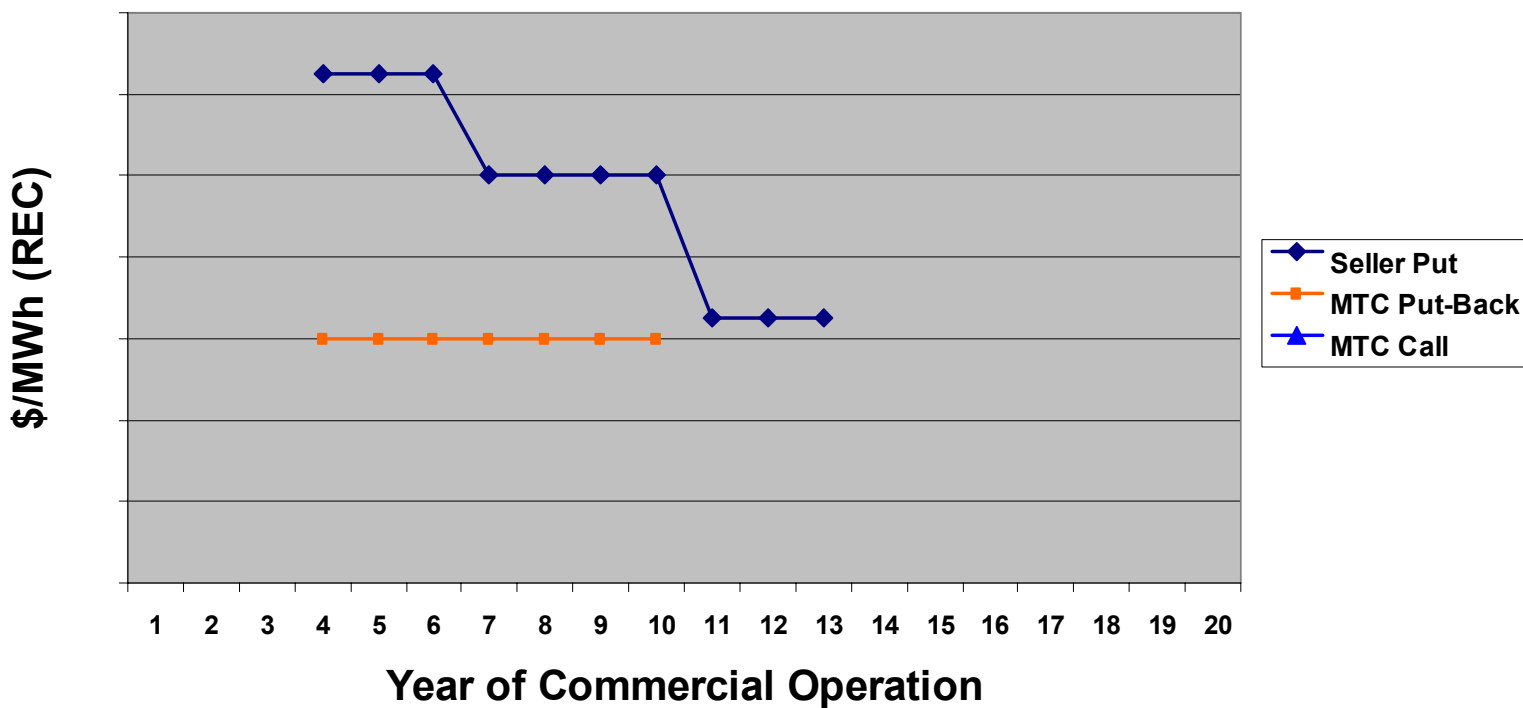
- Possible interpretations (part 2 of 2):
  - Applicant preserves limited up-side potential during option term
  - Call option provides potential value to MTC
  - Applicant avoids payment of premium to MTC

## Example 5: PSNH Collar



- Possible interpretations :
  - The creditworthy utility still required a REC “market signal” in order to secure regulatory approvals for the project
  - The project (a retrofit) may not require as many years of REC cash-flow certainty as a greenfield project

# Example 6: Seller Put & MTC Put-Back



- Possible interpretations:
  - Applicant willing to assume some REC price risk via Put-Back option (which allows MTC to sell RECs back to the applicant); this reduces overall exposure for MTC





# MGPP - Lessons Learned and Limitations

- REC purchase and option contracts can be structured to offer long-term price security
  - Will the financiers buy it?
- Later year price support is of greater concern for most applicants (i.e. years 5-15)
- Options (as guarantees) seem more attractive to developers than committing to REC sales
- MGPP is only a partial solution
  - Trust funds insufficient to support large projects, much less total MA renewable demand

# Looking Ahead . . .

- Seek to off-load round 1 REC contracts in order to release committed funds
- MGPP Round 2 – in the works
- Need creditworthy entities to step in and make long-term commitments to finance projects
  - Purchases by load serving entities
  - Purchases by large end users  
(or aggregations of smaller end users)



# MGPP Round 2 . . .

- Issue RFP ~ Fall 2004
- Refinements for put options
  - Limit total value and set minimum premium
  - Proposer pays a higher premium if proposer wants to retain the option after a forward sale of RECs to a third party
- Challenges
  - Leveraging limited funds
  - Encouraging proposers to maximize benefits to RET Contributors



# Additional Information . . .

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*Watch for a link to the MGPP round 2 RFP at*

[www.masstech.org/Grants\\_and\\_Awards/grant\\_dollars.htm](http://www.masstech.org/Grants_and_Awards/grant_dollars.htm)